

中国夜蛾科新种描述

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参加中国经济昆虫志第六册,夜蛾科(二)编写工作中,有下列三种新夜蛾需要在此記述新种的模式标本全部保存在北京农业大学昆虫标本室内。

新 种 記 述

1. 中华雅夜蛾 *Jambia sinica* (新种)

(图 1, 4, 4a)

体长 10—12 毫米;翅展 25—29 毫米。

头部灰褐色,混生黑鳞,额唇基有一黑色横带;触角纤毛状,黑褐色;复眼光滑;下唇鬚向上弯,伸达头顶,第二节黑褐色、杂有白鳞,第三节向上斜伸,黑色、两端白色。胸部黑褐色,杂有白色和棕色鳞片,后胸具毛丛;腹部暗褐色,第一节有扁平毛丛,背中具纵脊,第二和三节背中有毛丛,以第三节者明显;体腹面、胸部灰白色,腹部则呈灰褐色。足灰白色,前足腿节内侧黑色,各足胫节上有大黑斑两个,跗节各节上也具大黑斑。前翅黑褐色,外缘在脉间有三角形黑斑排成一行,亚缘线前半段黑色,且向内扩展成锯齿状黑斑,后半段则为灰白色,尤以臀角附近明显;外横线和中横线黑色,后半段很明显,并在第二肘室(Cu_2)内连成黑斑;内横线和亚基线呈黑色斜线;肾形斑和环形斑很大,但不明显,两斑之间为黑褐色;前缘有白点数个;缘鳞黑褐色,脉端则呈灰白线,臀角处色也较浅。后翅淡黑褐色,除中室端略现黑纹外,无其他斑纹;缘鳞同色,但基部有细的白边。翅反面灰褐色,沿外缘有两条黑褐色横线;前翅前缘有小黄斑,以外横线端部的最大而明显;后翅中室端有黑褐色斑。

雄蛾外生殖器(图 4):爪形突端部尖而略弯,基部弯曲,并具一端尖的小爪形突;背兜较狭,囊形突小;抱器端部尖突,抱钩细长、刺状。阳具(图 4a)粗短;角状器近端部,为一个刺和六个小刺。

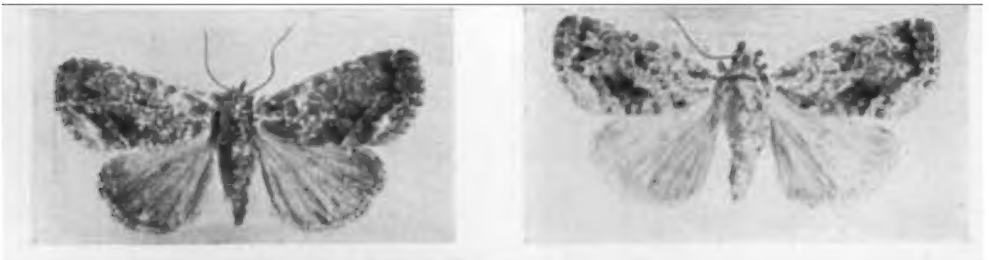


图 1 中华雅夜蛾(新种) *Jambia sinica* sp. n.

左♂,右♀(正模及配模)。

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正模 雄(图 1 左)北京公主坟 (1954-VII-18)。

配模 雌(图 1 右)北京农业大学 (1961-VII-6)。

副模 北京农业大学 1♀ (1961-VI-30); 罗道庄北京农业大学旧址 1♂ (1954-VI-12), 1♂、1♀ (1954-VII-2), 2♀♀ (1954-VIII-8), 2♀♀ (1955-VI-25), 1♂ (1955-VI-29), 1♂ (1957-IX-1); 颐和园清华农学院旧址 1♀ (1947-VII-31); 万寿山 1♂ (1947-VI-21); 天坛 1♂ (1950-VI-14); 妙峯山 1♂ (1955-VI-26); 以上副模 7♂♂、7♀♀ 及正、配模均为作者采集。北京农业大学 1♂ (1960-VI-10), 卧佛寺 1♂ (1962-VII-12) 李法圣采集。山东乐陵 1♀ (1962-VI-2), 2♂♂ (1962-VI-8) 为我系刘瑞祥同学在枣树下土中采蛹所羽化。此外尚有北京公主坟、香山和十三陵等处 5♂♂、4♀♀, 因多残损而未列入副模中。

此种与横綫雅夜蛾 (*Jambia transversa* Moore) 及日本雅夜蛾 (*J. japonica* Sugi) 近似, 但体形較小, 且前翅亚緣綫和外横綫的末端均向內斜伸, 直达后緣, 并不曲折; 与那两种末端弯轉与后緣垂直, 显然不同。雄蛾外生殖器与日本雅夜蛾也較近, 两者在爪形突的基部均具一小爪形突; 但該种抱器端鈍圓, 抱器背中央突伸成角状, 抱鈎短而弯、鈎状; 另外由阳具上的角状器等亦易区别。

2. 雪白夜蛾 *Chasminodes niveus* (新种)

(图 2, 5, 5a)

体长 10 毫米; 翅展 30 毫米。

头部白色; 触角纤毛状, 黄褐色, 基部复有白鳞; 复眼光滑; 下唇鬚向上弯, 伸达头顶, 白色, 第三节带黑褐色鳞。胸部和腹基部白色, 腹部背面略現黄褐色; 体腹面白色。足白色, 前足脛节和跗节基部均无黑斑。前翅白色, 无斑紋; 仅前緣基部在肩角处有黑褐色边, 外緣无黑点列, 前緣近翅尖处略現黑褐色鳞; 緣鳞白色。后翅白色, 无斑紋; 緣鳞白色。翅反面全为白色, 无斑紋; 緣鳞白色。

雄蛾外生殖器(图 5): 爪形突很直, 末端鈍圓; 囊形突很长; 抱器端薄而圓, 抱器腹中部突伸成角; 抱鈎基部呈 S 形弯曲, 端部略膨大, 末端尖銳。阳具(图 5a)基部向两侧突伸; 角状器位于中部, 形似犁头。

正模 雄(图 2)四川峨眉山九老洞 (1961-VIII-22), 为作者采集。



图 2 雪白夜蛾(新种) *Chasminodes niveus* sp. n. ♂(正模)。



图 3 黑痣白夜蛾(新种) *Chasminodes nigro stigma* sp. n. ♀(正模)。

此种外形上与日本产的全白夜蛾 (*C. pseudalbonitens* Sugi) 近似, 前翅中室端及外缘均无黑点, 但下唇鬚第三节为黑褐色而与該种全为白色不同; 由外生殖器的形状, 阳具角状器为犁头形, 抱钩基部呈 S 形弯曲等更易于与該种以及本属其他种区别。

3. 黑痣白夜蛾 *Chasminodes nigrostigma* (新种)

(图 3, 6)

体长 12 毫米; 翅展 35 毫米。

头部白色; 触角纤毛状, 褐色, 基部复白鳞; 复眼光滑; 下唇鬚向上弯, 仅达额的中部,

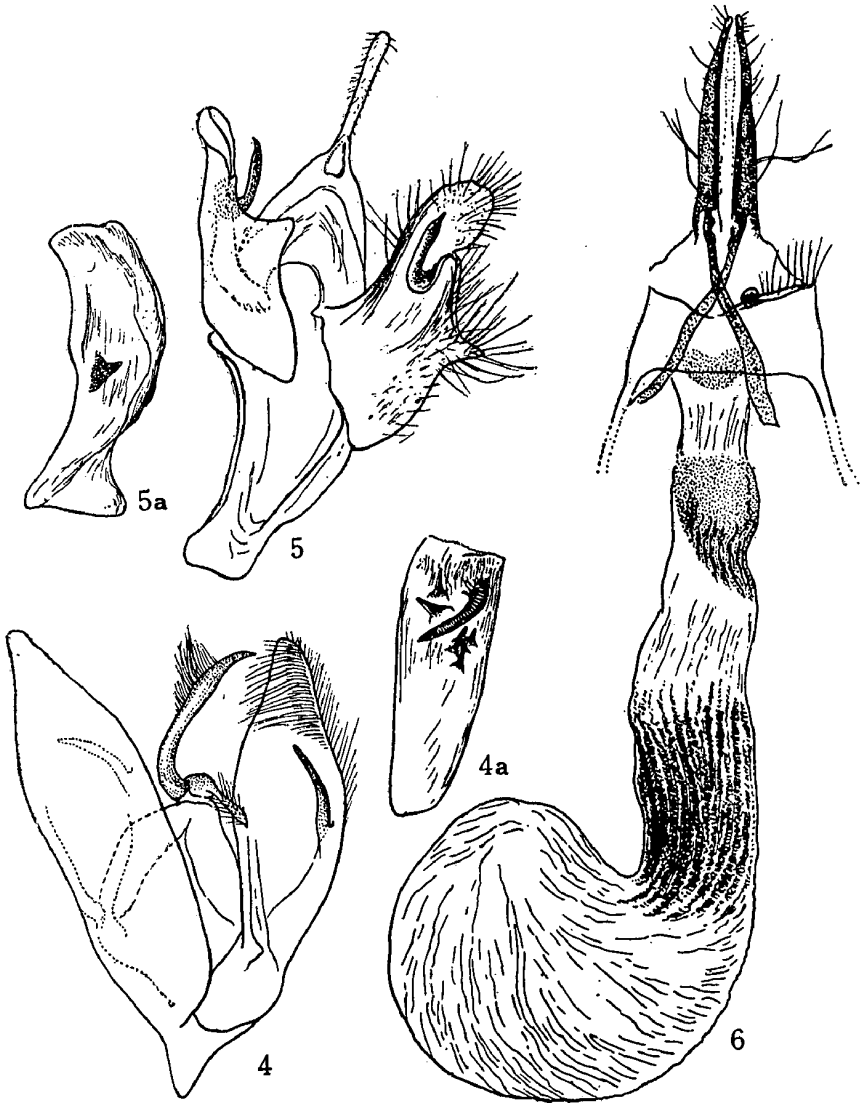


图 4—6

- 图 4 中华雅夜蛾(新种) *Jambia sinica* sp. n. 的外生殖器♂(副模); 4a. 为其阳具。
 图 5 雪白夜蛾(新种) *Chasminodes niveus* sp. n. 的外生殖器♂(正模); 5a. 为其阳具。
 图 6 黑痣白夜蛾(新种) *Chasminodes nigrostigma* sp. n. 的外生殖器♀(副模)。

全部白色,第三节无黑褐色鳞。胸部及腹部白色;腹部第一至五节背中有毛丛,毛白色,末端褐色,以第二至四节最明显;体腹面全为白色。足白色,仅中足胫节基部有一个小黑斑;前足胫节及跗节均无黑斑。前翅白色,中室端下角有一明显黑斑,外缘各室间有小黑点排成一列;缘鳞白色。后翅白色,无斑纹;缘鳞白色。翅反面白色;前翅外缘及顶角有一列小黑点,中室端的黑斑极不明显;后翅无斑纹;缘鳞白色。

雌蛾外生殖器(图 6): 产卵器狭长而直,除末端外均甚骨化;交配囊大而圆;导精管很长,基部密布黑褐色网状条纹,端部有褐色斑,斑的下端渐尖,并有黑褐色皱纹七八条。

正模 雌(图 3)、副模 1♀ 四川峨眉山九老洞(1961-VIII-23),均为作者采集。

此种雄蛾尚未采到,雌蛾与雪白夜蛾(*C. niveus*)新种仅隔一天采于同地,该种只知雄性;但根据下唇鬚全白,前翅中室端和外缘具明显的黑点等而断定为两个种。在本属已知种类中较接近于日本产的春田白夜蛾(*C. harutai* Sugi)和一点白夜蛾(*C. unipuncta* Sugi),但前者前足胫节和跗节均具黑斑,后者虽无黑斑,但无径副室;本种前翅径副室存在,且产卵器和交配囊等特征也很不同。

NOTES ON SOME NEW SPECIES OF CHINESE NOCTUIDAE

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In the present paper three new species of Chinese noctuid moths are noted. The type specimens are deposited in the insect collection of the Peking Agricultural College.

1. *Jambia sinica* Yang, sp. n. (Fig. 1, 4, 4a)

Length of body 10—12 mm; expanse of wing 25—29 mm.

Head greyish brown, mixed with black scales, a blackish transverse band on the front; antennae ciliated, blackish brown, eyes smooth; palpi upturned, reaching to the vertex of head, 2nd segment blackish brown, mixed with white scales, 3rd segment black with both basal and apical fringes white. Thorax blackish brown, mixed with white and brown scales, metathorax with crests; abdomen dark brown, with a flat crest on the 1st segment, dorsal crests on the 2nd and 3rd segments; the ventral surface of thorax greyish white, and the abdomen greyish brown. Legs greyish white; fore-femora with inside black; all the tibiae with two large black spots, and tarsi also with large black spots on each joint. Forewings blackish brown, a series of black triangular spots on termen in the cells, subterminal line with the anterior half black and dentate inside, the posterior half greyish white; postmedial line and median line black, and with the posterior half distinctly joined by the black stripe in cell Cu₂; reniform and orbicular spots very large but indistinct, and blackish brown between them; antemedial line and subbasal line black and oblique; several whitish spots on the costa; cilia blackish brown, greyish white at tip of veins, and also at the tornal area. Hindwings pale blackish brown, without other markings except the dark discoidal spots; cilia of same color, but with a fine whitish basal line across. Under surface greyish brown, with two blackish brown lines across the termen; forewings with small yellow spots on the costa, that at the tip of posterior medial line large and more distinct; hindwings with blackish brown discoidal spots.

Male genitalia (Fig. 4): Uncus pointed at tip and slightly curved, a single small uncus-like process on the curved basal part; tegumen narrow, saccus small; valva with the apex pointed, and the harpe slender, spine-like. Aedeagus (Fig. 4a) with a large spine and six small spines.

Holotype ♂ (Fig. 1 left) (1954-VII-18), allotype ♀ (Fig. 1 right) (1961-VII-6) and paratypes 7♂♂, 7♀♀ collected by the author in Peking, also 2♂♂ by Mr. Lee Fa-sheng; and 2♂♂, 1♀ from Loling, Shantung Province, collected by Mr. Liu Rui-xiang.

This species is similar to *J. transvensa* Moore and *J. japonica* Sugi, but smaller in size, and differs by the subterminal line and posterior medial line with the basal part obliquely extending to the posterior margin and not curved. It can also be separated from other species by the male genitalia.

2. *Chasminodes niveus* Yang, sp. n. (Fig. 2, 5, 5a)

Length of body 10 mm; expanse of wing 30 mm.

Head white; antennae ciliated, yellowish brown, and covered with whitish scales at the base; eyes smooth; palpi upturned, reaching to the vertex of head, white, 3rd segment with blackish brown scales. Thorax and basal part of abdomen white, dorsum of abdomen slightly yellowish brown; the ventral surface of body white. Legs white, tibiae and tarsi of fore legs without black markings at the basal parts. Forewings white, immaculate, except the basal part of the costa blackish brown at the humeral angle, termen without a series of black points, but with some blackish brown scales on the costa near the apex; cilia white. Hindwings white, immaculate, cilia white. Under surface uniformly white, immaculate; cilia white.

Male genitalia (Fig. 5): Uncus very straight and rounded at its apex, saccus very long; valvula laminate and rounded, sacculus angularly produced at the middle; harpe with the base s-shaped curved and pointed at tip. Aedeagus (Fig. 5a) with the base produced at both sides; cornutus with a large spine at the middle.

Holotype ♂ (Fig. 2) Szechwan: Mt. Omei (1961-VIII-22), collected by the author.

This species is similar to the Japanese species *C. pseudalbonitens* Sugi by the immaculate forewings, but the 3rd segment of palpi is blackish brown, not white as in the latter. The male genitalia is very distinct and can easily be separated from any other member of this genus.

3. *Chasminodes nigrostigma* Yang, sp. n. (Fig. 3, 6)

Length of body 12 mm; expanse of wing 35 mm.

Head white; antennae ciliated, brown and covered with whitish scales at the base; eyes smooth; palpi upturned, only reaching to the middle of frons, entirely white and without blackish brown scales on the 3rd segment. Thorax and abdomen white; abdomen with a dorsal series of crests on 1st to 5th segments, the crests white and tipped with brown. Legs white, only the mid tibiae each with a small black spot at the base, fore legs without black spots on both the tibiae and tarsi. Forewings white, each with a distinct black discoidal point and a faint marginal series of blackish dots; cilia white. Hindwings white, immaculate, cilia white. Under surface white; forewings with a series of blackish dots on the termen and tip, black discoidal point indistinct; hindwings immaculate, cilia white.

Female genitalia (Fig. 6): Ovipositor narrow and long, and almost straight, heavily sclerotized except at the apex; bursa very large and rounded at the bottom, ductus very long and with distinct brown pattern as figured.

Holotype ♀ (Fig. 3), paratype 1 ♀, Szechwan: Mt. Omei (1961-VIII-23), collected by the author. Male unknown.

This species is similar to the two Japanese species *C. harutai* Sugi and *C. unipuncta* Sugi, but different from the former by forelegs without black spots on both the tibiae and tarsi; from the latter by the presence of the areole in forewings. The female genitalia is very different in shape.